

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) An optical image detector that illuminates incident lights on a surface of an object, the optical image detector comprising:

a single light source; and
~~an incident light generator comprising a plurality of reflecting plates configured to receive a light from the single light source and to generate at least two groups of incident lights having different incident angles with respect to the surface of the object, and then the incident lights directed toward the object to generate an image for surface morphology of the object.~~

2. (Previously Presented) The optical image detector according to claim 1, wherein the incident light generator comprises:

a first reflecting plate reflecting the lights of the single light source to generate a first group of incident lights having a first incident angle with respect to the surface of the object;

a second reflecting plate reflecting the lights of the single light source to generate a second group of incident lights having a second incident angle greater than the first incident angle with respect to the surface of the object; and

a third reflecting plate reflecting the lights of the single light source to generate a third group of incident lights having a third incident angle greater than the second incident angle with respect to the surface of the object.

3. (Original) The optical image detector according to claim 1, further comprising an optical sensor that is disposed over the surface of the object to sense the lights reflected from the surface of the object, wherein the optical sensor converts an image for the surface morphology of the object into photocurrents.

4. (Currently Amended) A navigation device comprising:

a case including a lower panel having an opening;
a single light source installed in the case; and
an incident light generator disposed adjacent to the single light source and comprising a plurality of reflecting plates configured to receive a light from the single light source and to generate at least two groups of incident lights having different incident angles with respect to a surface of an object, wherein the incident lights are illuminated on the surface of the object through the opening.

5. (Previously Presented) The navigation device according to claim 4, wherein the single light source is a light emitting device that generates infrared or visual spectrum rays.

6. (Previously Presented) The navigation device according to claim 4, wherein the at least two groups of incident lights comprises:

a first group of incident lights having a first incident angle with respect to the surface of the object;
a second group of incident lights having a second incident angle greater than the first incident angle with respect to the surface of the object; and
a third group of incident lights having a third incident angle greater than the second incident angle with respect to the surface of the object.

7. (Currently Amended) The navigation device according to claim 6, wherein the incident light generator reflecting plates further comprises comprise:

a first reflecting plate reflecting the lights of the single light source to generate the first group of incident lights;
a second reflecting plate reflecting the lights of the single light source to generate the second group of incident lights; and
a third reflecting plate reflecting the lights of the single light source to generate the third group of incident lights.

8. (Original) The navigation device according to claim 4, further comprising an optical sensor that is disposed over the opening to sense the lights reflected from the surface of the object, wherein the optical sensor converts an image for the surface morphology of the object into photocurrents.

9. (Previously Presented) An optical image detector which illuminates incident lights on a surface of an object to generate an image corresponding to a surface morphology of the object, the optical image detector comprising:

a single light source generating a first light; and
an incident light generator configured to reflect the first light to generate at least two groups of incident lights having different incident angles with respect to the surface of the object, and then illuminated on the surface of the object; and,
wherein the incident light generator comprises:

a first reflecting plate configured to reflect the first light to generate a first group of incident lights having a first incident angle with respect to the surface of the object;

a second reflecting plate configured to reflect the lights of the single light source to generate a second group of incident lights having a second incident angle greater than the first incident angle with respect to the surface of the object; and

a third reflecting plate configured to reflect the lights of the single light source to generate a third group of incident lights having a third incident angle greater than the second incident angle with respect to the surface of the object.

10. (New) The optical image detector according to claim 1, wherein the at least two groups of incident lights comprise a plurality of first incident lights being parallel to each other and a plurality of second incident lights being parallel to each other.

11. (New) The optical image detector according to claim 10, wherein the first incident lights and the second incident lights cross each other.